

We claim:

1. A process for preparing autocatalytic polyether alcohols by reacting H-functional starter substances containing at least one amino group which is catalytically active in the urethane reaction, in particular a tertiary amino group, and at least one group which is reactive toward alkylene oxides, in particular a primary and/or secondary amino group and/or hydroxyl group, with alkylene oxides, which comprises
 - a) dissolving the starter substance in a solvent,
 - b) reacting the solution with alkylene oxides.
2. A process as claimed in claim 1, wherein the solvent is a polyether alcohol having a hydroxyl number of from 20 to 1200 mg KOH/g and a functionality of from 2 to 8.
3. A process as claimed in claim 1, wherein the solvent is a polyether alcohol having a hydroxyl number of from 20 to 100 mg KOH/g and a functionality of from 2 to 3.
4. A process as claimed in any of claims 1-3, wherein a polyether alcohol which has been prepared by addition of alkylene oxides onto H-functional starter substances in the presence of an alkaline catalyst and from which the catalyst has not been removed after the addition reaction of the alkylene oxides is used as solvent.
5. A process as claimed in claim 1, wherein organic solvents which are chemically inert toward alkylene oxides are used as solvent.
6. A process as claimed in claim 1, wherein step b) is carried out in the presence of an alkaline catalyst.
7. A process as claimed in claim 1, wherein the catalyst in step b) is used in an amount of from 0.1 to 3.0% by weight, based on the weight of all H-functional starter substances.
8. A process as claimed in any of claims 1 to 4, wherein predominantly ethylene oxide, propylene oxide and/or butylene oxide are used as alkylene oxides.
9. A process as claimed in any of claims 1 to 5, wherein the starter substances containing at least one amino group which is catalytically active toward the urethane reaction, in particular a tertiary amino group, and at least one group which

is reactive toward alkylene oxides, in particular a primary and/or secondary amino group and/or hydroxyl group, are selected from the group consisting of dimethylaminoethylamine, dimethylaminopropylamine, diethylaminoethylamine, diethylaminopropylamine, N-(3-dimethylaminopropyl)-N,N-diisopropanolamine, dimethylethanolamine, N,N-dimethylaminoethyl N'-methyl-N'-hydroxyethylamino-ethyl ether, N,N-bis(3-dimethylaminopropyl)amino-2-propanolamine, bis(N,N-dimethyl-3-aminopropyl)amine, N,N-dimethylaminoethoxyethanol, N-(3-aminopropyl)imidazole, N-(2-dimethylaminoethyl)-N-methylethanolamine, N-(2-hydroxypropyl)imidazole, dimethylaminohexanol and mixtures of at least two of the compounds mentioned.

10. A polyether alcohol which can be prepared as claimed in any of claims 1 to 6.
11. A process for producing polyurethanes by reacting polyisocyanates with compounds having at least two hydrogen atoms which are reactive toward isocyanate groups, wherein a polyether alcohol as claimed in claim 9 is used as catalyst.